

Environmental Management Performance Report

February 2002



**Pacific Northwest
National Laboratory**

Operated by Battelle for the
U.S. Department of Energy



Department of Energy
Richland Operations Office

PREPARED FOR THE U.S. DEPARTMENT OF ENERGY, RICHLAND OPERATIONS OFFICE
OFFICE OF ENVIRONMENTAL MANAGEMENT

Table of Contents

INTRODUCTION	1
EXECUTIVE SUMMARY	2
SAFETY OVERVIEW	2
TOTAL RECORDABLE CASE INCIDENCE RATE.....	2
LOST WORKDAY CASE INCIDENCE RATE	3
PROJECT PERFORMANCE SUMMARY	4
MISSION	4
ACTIVITY SUMMARY	4
PERFORMANCE DATA AND ANALYSIS	6
COST/SCHEDULE PERFORMANCE STOPLIGHT	6
PNNL PERFORMANCE DATA AND ANALYSIS	7

Introduction

This document provides the Department of Energy Richland Operations Office (DOE-RL) with a report of the Pacific Northwest National Laboratory (PNNL) performance by Battelle Memorial Institute and its subcontractors.

In Section A, the Executive Summary, text and graphics report the safety metrics status for all PNNL activities. Senior management's overall performance assessment of all Environmental Management activities conducted at PNNL is presented in a stoplight chart.

Section B, Project Performance Summary, provides a brief summary of the month's performance for the PNNL lead activity, PNNL Waste Management (PBS RL-SS01), and is presented in the narrative and Cost / Schedule Performance Stoplight. More detailed information can be found within PNNL-7911-121a, PNNL's Quarterly Project Status Report, for the first quarter of Fiscal Year (FY) 2002. Summary analyses pertaining to PNNL's support to other Project Baseline Summaries (PBSs) are addressed in the contractor's report having lead responsibility for that scope.

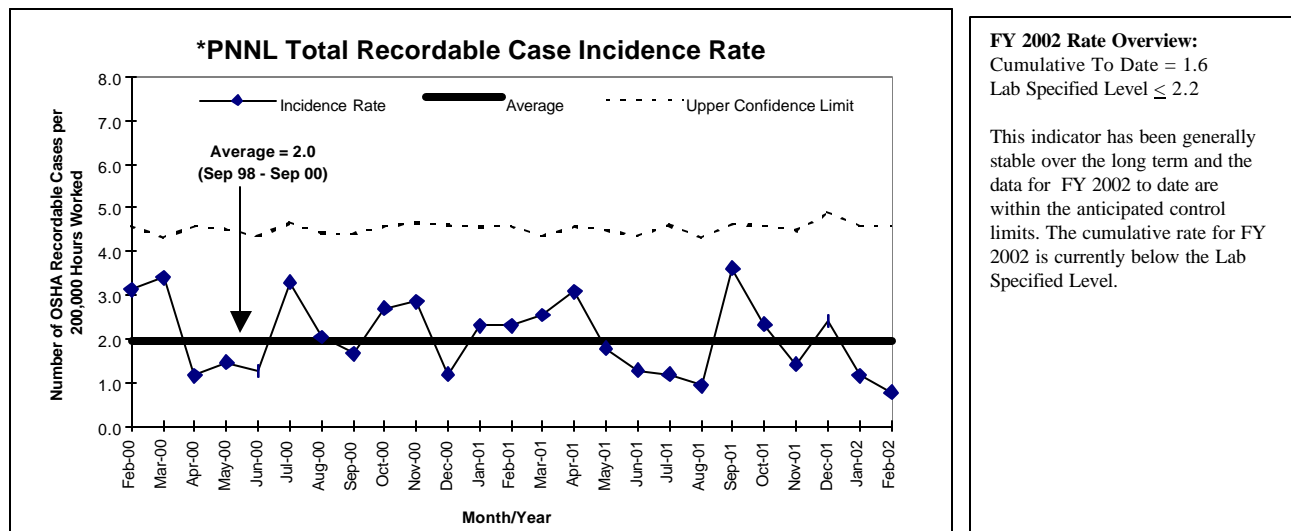
Unless otherwise noted, information in this report is current as of February 24, 2002.

This section provides an executive-level summary of performance information and is intended to bring to management's attention that information considered to be most noteworthy. This section includes an overview of safety performance and assessment spotlight charts.

Safety Overview

The focus of this section is on documenting trends in lab wide work-related injury and illness rates. These are the same performance indicators as appear in the FY 2002 Battelle Performance Evaluation and Fee Agreement, which is part of the PNNL Operations Contract. The monthly rates for Recordable and Lost Workday cases are presented graphically in this section and are monitored for statistically significant changes. Current efforts to improve performance are being made through the implementation of the Integrated Safety Management System (ISMS) and Voluntary Protection Program (VPP).

Total Recordable Case Incidence Rate



The following rating reflects the overall assessment of recordable case incidence for PNNL. *(Narrative not required when rating is green.)*

Green

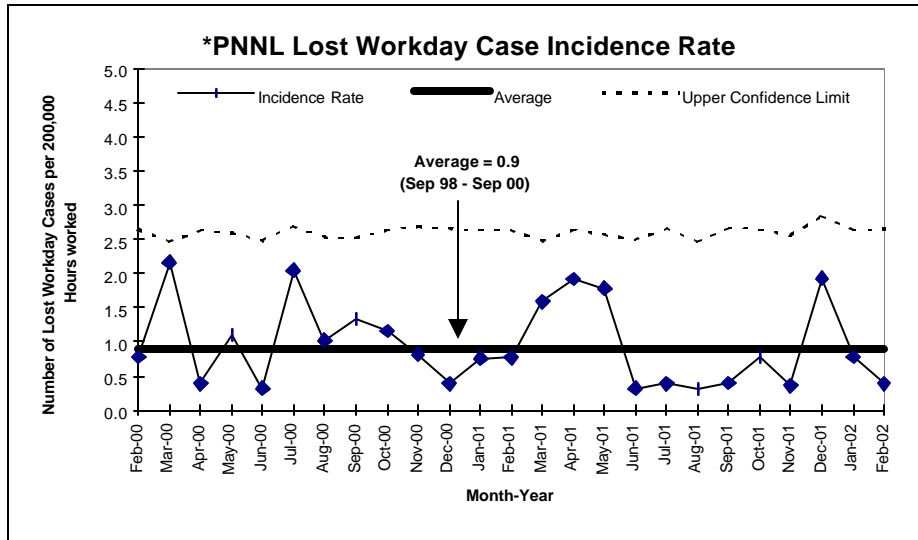
*Includes all PNNL Operations.

Green: Satisfactory

Yellow: Significant improvement required

Red: Unsatisfactory

Lost Workday Case Incidence Rate



FY 2002 Rate Overview:
 Cumulative To Date =0.8
 Lab Specified Level ≤ 1.1

This indicator has been generally stable over the long term. The data points for FY 2002 to date are within the anticipated control limits. The cumulative rate for FY 2002 is currently below the Lab Specified Level.

The following rating reflects the overall lost workday case incidence for PNNL. (*Narrative not required when rating is green.*)

Green

*Includes all PNNL Operations.

Green: Satisfactory

Yellow: Significant improvement required

Red: Unsatisfactory

This section provides cost and schedule performance, any significant issues, and baseline change request information for the period covered. In FY 2002, Battelle Memorial Institute has lead responsibility over PBS RL-SS01, PNNL Waste Management WBS 3.4.1.7.

Mission

WBS 3.4.1.7 provides PNNL with waste management services and compliant operations in support of science and technology development for the multiprogramming needs of the U.S. Department of Energy (DOE) Complex. These services include:

- Essential surveillance and maintenance of DOE laboratory facilities assigned to PNNL for safe containment of radioactive and hazardous materials
- Infrastructure required to manage wastes and effluents currently generated at the PNNL
- Operational compliance services to meet regulatory requirements and operating permits including environment, safety, and health regulations
- Management of legacy wastes and contamination remaining from past PNNL research operations.

Activity Summary

The following summarizes the activities associated with PNNL Waste Management services and operations conducted during February 2002.

- Scheduled Radiochemical Processing Laboratory (RPL) radiological surveys and nuclear control inspections were performed. A criticality safety inspection was completed and nuclear material holdings in all material balance areas (MBA) were reviewed with MBA Custodians. All criticality safety controlled areas (CSCAs) and exempt areas (EA) were inspected to ensure operations with fissionable material complied with PNNL and RPL requirements. Utility isolation continues on 331-B in preparation for demolition of the building.
- All air and water samples required during the month of February were collected and confirmed that all routine effluent discharges from PNNL operations reported to date are below historical release levels and compliant with existing state and federal permits. Emission data for the RPL show that approximately 12 curies (Ci) of tritium were released between December 27, 2001 and January 26, 2002. This is the first set of samples that will be tracked and trended against the 1,800 Ci limit for RPL for calendar year 2002 emissions. The Environmental Molecular Science Laboratory (EMSL) monthly Discharge Monitoring Report (DMR) for January was submitted directly to the City of Richland on February 7, 2002, thereby satisfying the February deliverable within PNNL Milestone RLSS01F201 (Demonstrate Compliance with Industrial Wastewater Permit Limits for EMSL). The DMR was submitted in accordance with Part III, Section A of Industrial Wastewater Discharge Permit No. CR-IU005. This report covered the period January 1 to January 31, 2002. All measured parameters for wastewater discharged to the Richland publicly owned treatment works were within permit limits. The Hazardous Waste Operations Task staff members have been

concentrating on consolidation of like items of waste in order to reduce overall costs and liability to the Lab. This effort involves management of waste items from most of the remote areas, including Sigma V, Applied Process Engineering Laboratory, 2400 Stevens, and Research Technology Lab (RTL) -590 as well as consolidating items for treatment at the Hazardous Waste Treatment Unit located in the RPL. In addition, the Hazardous Waste Operations Task staff members shipped thirty drums (578 kgs) and the Packaging and Transportation staff members supported twenty-four shipments including nine radioactive shipments offsite, two radioactive shipments onsite, and thirteen hazardous material shipments onsite and offsite.

- Nine facility modification permits (FMPs) were evaluated this month. FMP reviews are performed according to procedure EM-FEMP-002 to take any steps necessary to comply with any applicable air or water regulatory requirements associated with the modification itself or the operation of the modified facility, equipment or system.
- Staff members continued work to dispose of two legacy waste items located in the 331 Building. When these items have been disposed, all legacy waste activities will be complete for that building. Staff continued to monitor the sale of 15.7 metric tons of graphite generated during the 318 Legacy Waste Project cleanout. DOE-RL and Headquarters have approved the sale. During March, the contract will be finalized and the export control review completed. Upon completion of the review, the material will be shipped to the purchasing company. Cleanout of the legacy tank samples in room 517 at RPL continued as well as work on the legacy uranium/plutonium samples in room 410. Additionally, the Legacy team began the disposal process for the uranium and plutonium metals in room 50A at RPL. These three projects combined have resulted in over 550 items being processed for disposal. All completed legacy waste packages that were transferred to the Radiological Waste Operations group are being tracked. There are approximately 44 disposal requests related to 15 legacy waste line items awaiting shipment to the Central Waste Complex or the Low-level Waste Burial Grounds at this time.

Performance Data and Analysis

As of February 24th, 2002, the cumulative costs are \$4.7M with a positive cost variance of \$.7M and a cumulative schedule variance of negative \$.4M. The cumulative cost variance is 13% and the cumulative schedule variance is a negative 7%.

A Baseline Change Request (PWM-2002-001) reflecting the FY02 reprice and replanning was approved. The adjustment to the spend plan (BCWS) was applied in the month of February, preserving historic values and reflecting the FY02 rebaseline values in the remaining FY.

Cost Performance (\$M):			
	BCWP	ACWP	Variance
PNNL Waste Management	\$5.4	\$4.7	\$.7
Schedule Performance (\$M):			
	BCWP	BCWS	Variance
PNNL Waste Management	\$5.4	\$5.8	(\$.4)

FY 2002 Cost/Schedule Performance - All Fund Types **Cumulative to Date Status - (\$000)**

WBS	PBS	BCWS	BCWP	ACWP	CV	%	SV	%
3.4.1.7	RL-SS01	<u>\$5,772</u>	<u>\$5,346</u>	<u>\$4,653*</u>	<u>\$693</u>	<u>13</u>	<u>(\$426)</u>	<u>-7</u>
Total		<u>\$5,772</u>	<u>\$5,346</u>	<u>\$4,653*</u>	<u>\$693</u>	<u>13</u>	<u>(\$426)</u>	<u>-7</u>

*PNNL has \$1.194M carryover, is expecting \$15.044M new B/A in FY 2002, for a total of \$16.238M. Current new B/A obligated is \$9.283M.

Cost/Schedule Performance Stoplight

The following rating reflects overall cost and schedule performance for PNNL Waste Management activities. *(Narrative not required when rating is green.)*

<p>The cumulative cost variance is largely due to issues within the RPL and Legacy Waste Projects. Programmatic efficiencies and delayed billings attribute to the majority of the variance. The projects expect to complete within the approved budget.</p> <p>The cumulative schedule variance is largely due to delays in receiving the switchgear equipment within the RPL project. Delivery of the equipment is expected in early March. Although receipt is later than planned, a recovery schedule was implemented and the project is forecasted to complete two weeks beyond the baseline date.</p>	<div>GREEN</div>
<div>Green: Satisfactory Yellow: Significant improvement required Red: Unsatisfactory</div>	

PNNL Performance Data and Analysis

